

**Amendment and Response Under 37 C.F.R. §1.116 - Expedited Examining Procedure**

Page 2 of 6

Applicant(s): HANSON et al.

Serial No.: 09/814,252

Confirm. No.: 6198

Filed: 21 March 2001

For: PRIMERS FOR USE IN DETECTING BETA-LACTAMASES

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**Amendments to the Claims**

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

**Listing of Claims**

1-2. (canceled)

4-5. (canceled)

7-10. (canceled)

11. (previously presented) A primer selected from the group of:

5' - CTC GAT GAT GCG TGC TTC GC - 3' (SEQ ID NO:32);

5' - GCG ACT GTG ATG TAT AAA CG - 3' (SEQ ID NO:33); and full-length

complements thereof.

17. (withdrawn - currently amended) A method for identifying a PSE1, PSE4, or CARB3 family beta-lactamase within a Gram Negative organism in a clinical sample, the method comprising:

providing a pair of oligonucleotide primers, each having 15-35 nucleotides, specific for nucleic acid characteristic of the PSE1, PSE4, and CARB3 beta-lactamase enzymes, wherein one primer of the pair is complementary to at least a portion of the beta-lactamase nucleic acid in the sense strand and the other primer of each pair is complementary to at least a portion of the beta-lactamase nucleic acid in the antisense strand;

annealing the primers to the beta-lactamase nucleic acid;

**Amendment and Response Under 37 C.F.R. §1.116 - Expedited Examining Procedure**

Page 3 of 6

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simultaneously extending the annealed primers from a 3' terminus of each primer to synthesize an extension product that is complementary to the nucleic acid strands annealed to each primer wherein each extension product after separation from the beta-lactamase nucleic acid serves as a template for the synthesis of an extension product for the other primer of each pair;

separating the amplified products; and

analyzing the separated amplified products for a region characteristic of the beta-lactamase.

18-21. (canceled)

24-27. (canceled)

30-37. (canceled)

38. (withdrawn - currently amended) The method of claim [37] 17 wherein the primers are selected from the group of:

5' - CTC GAT GAT GCG TGC TTC GC - 3' (SEQ ID NO:32);

5' - GCG ACT GTG ATG TAT AAA CG - 3' (SEQ ID NO:33); and full-length complements thereof.

49-55. (canceled)

56. (currently amended) A diagnostic kit for detecting a PSE1, PSE4, or CARB3 family beta-lactamase within Gram Negative organisms which comprises packaging, containing, separately packaged:

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Page 4 of 6

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- (a) at least one primer pair capable of hybridizing to a beta-lactamase nucleic acid characteristic of the PSE1, PSE4, [or] and CARB3 families of beta-lactamase enzymes, wherein each primer of the pair includes 15-35 nucleotides;
- (b) a positive and negative control; and
- (c) a protocol for identification of the beta-lactamase nucleic acid characteristic of the PSE1, PSE4, or CARB3 families of beta-lactamase enzymes.

57. (previously presented) The kit of claim 56 wherein at least one of the primers is selected from the group consisting of:

5' - CTC GAT GAT GCG TGC TTC GC - 3' (SEQ ID NO:32);

5' - GCG ACT GTG ATG TAT AAA CG - 3' (SEQ ID NO:33); and full-length complements thereof.